

```
! !SEQUENCE_LIST 1.0
! FINDPATTERNS on GenEMBL: * allowing 0 mismatches
!
1 AGCCATAACATGAACT{ }TCCATTAGTAGTTACATATACTACCGAGACTCAGTGAGGCCGATTCACT
```

```
> O <
O I O IntelliGenetics
> O <
```

Quest - Quick User-directed Expression Search Tool  
Release 5.4

-- Outline of search "36\_38\_40iss" --

Selected search type is key against sequence data banks or files.

Selected scope is Sequence.

Selected sequence key from "spectator091n.key":

36\_38\_40 (NA) ID 36\_38\_40 NA preliminary pattern

```
1 followed by
2 agccatatacatgaa
2 any number of any character
2 tccatttagtagtagtagtacatactacgcaagactcagtgaaggccgattcaccatctcc
2 gatcgccggatcaccgtatcgacgtc
```

Selected data banks and files:

Data bank : Issued\_NA , all entries

-- Output Parameters --

Format Options:	File Options:	
Nucleic acid code matching	Exact	Indirect file
Find non-matching hits only	No	Sequence or key file
Report key used	Yes	List of hits
Note position of hit	Yes	Hit display
Display full annotations	Yes	Name and annotations
Sequence context	50	

-- Run Parameters --

Run mode	Batch
Time to start comparison	now
Notify at end of run	No

No hits found.

-- Search Statistics --

Times:	CPU	Total Elapsed
	00:06:48.06	00:16:47.00
Number of sequences searched:	325093	
Number of sequence hits:	0	
Number of separate matches:	0	
Number of sequence hits saved:	0	

Wed Sep 19 09:08:04 2001

36\_38\_40ngs.find

Page 1

```
!SEQUENCE_LIST 1.0
!FINDPATTERNS on geneseqn: * allowing 0 mismatches
!
1 AGCCATAACATGACN{ }TCCATTAGTAGTAGTTACATACTACGGCAGACTCAGTGAAAGGCCGATTCACT
```

```
> O <
O \O Intelligenetics
> O <
```

Quest - Quick User-directed Expression Search Tool  
Release 5.4

-- Outline of search "36\_38\_40open" --

Selected search type is key against sequence data banks or files.  
Selected scope is Sequence.

Selected sequence key from "spector091n.key":  
36\_38\_40 (NA) ID 36\_38\_40 NA preliminary pattern

```
1 followed by
2 agccataacatgaaC
any number of any character
tccatttagtagtagtagtacataactacgcaactcagtgaaaggccgattcaccatctcc
any number of any character
gatcgcgaggatccgttatggacgtc
```

Selected data banks and files:

Data bank : Pending\_NA , all entries

-- Output Parameters --

Format Options:	File Options:	
Nucleic acid code matching	Exact	Indirect file
Find non-matching hits only	No	Sequence or key file
Report key used	Yes	List of hits
Note position of hit	Yes	Hit display
Display full annotations	Yes	Name and annotations
Sequence context	50	

-- Run Parameters --

Run mode	Batch
Time to start comparison	now
Notify at end of run	No

No hits found.

-- Search Statistics --

Times:	CPU	Total Elapsed
	15:11:54.08	06:50:19.00
Number of sequences searched:	15472368	
Number of sequence hits:	0	
Number of separate matches:	0	
Number of sequence hits saved:	0	

Wed Sep 19 09:08:01 2001

36\_38\_40est.find

```
!SEQUENCE_LIST 1.0
!FINDPATTERNS on EST: * allowing 0 mismatches
!
1 AGCCATAACATGAACN[ ]TCCATTAGTAGTTACATATACTACCGAGACTCAGTGAGGGCCGATTCACTACG
```

> O <  
 O I O IntelliGenetics  
 > O <

Quest - Quick User-directed Expression Search Tool  
 Release 5.4

-- Outline of search "37\_39\_41" --

Selected search type is key against sequence data banks or files.  
 Selected scope is Sequence.

Selected sequence key from "spector091p.key":  
 37\_39\_41 (AA) ID 37\_39\_41 AA preliminary pattern

1 shmn  
 2 any number of any character  
 2 issssyiyiyadsvkgrftis  
 2 any number of any character  
 2 drgstgndv

Selected files:

File : 37\_39\_4lags.pep

-- Output Parameters --

Format Options:  
 Nucleic acid code matching Exact  
 Find non-matching hits only No  
 Report key used Yes  
 Note position of hit Yes  
 Display full annotations 50

File Options:  
 Indirect file  
 Sequence or key file  
 List of hits  
 Hit display  
 Name and annotations

The invention relates to an agonist antibody (Ab) which binds to a thrombopoietin receptor (TPO-R). The antibodies which bind the TPO-R can be used in the same way and for the same indications as thrombopoietin (TPO). They can stimulate proliferation, differentiation or growth of megakaryocytes. They may also be able to stimulate megakaryocytes to increase platelet production. They can be used for treating immunological or hematopoietic disorders, especially thrombocytopenia. Thrombocytopenia -associated bone marrow hypoplasia (e.g. aplastic anemia following chemotherapy or bone marrow transplant), may be effectively treated with the antibody compounds as well as disorders such as disseminated intravascular coagulation (DIC), immune thrombocytopenia (HIV-induced and non HIV-induced), chronic idiopathic thrombocytopenia, congenital thrombocytopenia, thrombotic thrombocytopenia and myelodysplasia. They can also be used in e.g. myelotoxic chemotherapy for treatment of solid tumours or leukaemia, myeloablative chemotherapy for autologous or allogeneic bone marrow transplant, myelodysplasia, idiopathic aplastic anaemia, congenital thrombocytopenia, and immune thrombocytopenia. The antibodies which bind to the MUSK receptor can be used for improving neuromuscular function in a patient, e.g. in muscular dystrophy. The products can also be used for detection and diagnosis. The antibodies have a longer half-life than the natural ligand for the TPO-R. Sequences AAY06713-Y06718 represent single chain Fv (scFv) fragments of various antibodies.

Run mode Batch  
 Time to start comparison now  
 Notify at end of run No

-----

1 match found in sequence:  
 aay06717 ; Antibody 12B5 single chain Fv (scFv) fragment.  
 (from "37\_39\_4lags.pep")  
 TOIG of: aay06717 check: 1357 from: 1 to: 279

ID AAY06717 standard; Protein; 245 AA.  
 AC AAY06717;  
 XX DT 17-JUN-1999 (first entry)  
 DE Antibody 12B5 single chain Fv (scFv) fragment.  
 KW Agonist antibody; thrombopoietin receptor; TPO-R; thrombopoietin; DIC; megakaryocyte; platelet; immunological; hematopoietic; thrombocytopenia; bone marrow hypoplasia; disseminated intravascular coagulation; anemia; myelodysplasia; myelotoxic chemotherapy; leukaemia; tumour; MUSK; CDR; neuromuscular; muscular dystrophy; complementarity determining region.  
 XX OS Homo sapiens.

Key Location/Qualifiers  
 FT Misc-difference 208 /note= "unspecified"

PR 25-AUG-1997; 97US-0918148.  
 XX (GETH ) GENENTECH INC.  
 PA  
 XX PI Adams CW, Carter PJ, Fendly BM, Gurney AL;  
 XX DR WPI; 1999-204666/17.

PT New thrombopoietin receptor agonist antibodies - useful for treating immunological or hematological disorders Disclosure; Fig 1; 86pp; English.

CC The invention relates to an agonist antibody (Ab) which binds to a thrombopoietin receptor (TPO-R). The antibodies which bind the TPO-R can be used in the same way and for the same indications as thrombopoietin (TPO). They can stimulate proliferation, differentiation or growth of megakaryocytes. They may also be able to stimulate megakaryocytes to increase platelet production. They can be used for treating immunological or hematopoietic disorders, especially thrombocytopenia. Thrombocytopenia -associated bone marrow hypoplasia (e.g. aplastic anemia following chemotherapy or bone marrow transplant), may be effectively treated with the antibody compounds as well as disorders such as disseminated intravascular coagulation (DIC), immune thrombocytopenia (HIV-induced and non HIV-induced), chronic idiopathic thrombocytopenia, congenital thrombocytopenia, thrombotic thrombocytopenia and myelodysplasia. They can also be used in e.g. myelotoxic chemotherapy for treatment of solid tumours or leukaemia, myeloablative chemotherapy for autologous or allogeneic bone marrow transplant, myelodysplasia, idiopathic aplastic anaemia, congenital thrombocytopenia, and immune thrombocytopenia. The antibodies which bind to the MUSK receptor can be used for improving neuromuscular function in a patient, e.g. in muscular dystrophy. The products can also be used for detection and diagnosis. The antibodies have a longer half-life than the natural ligand for the TPO-R. Sequences AAY06713-Y06718 represent single chain Fv (scFv) fragments of various antibodies.

SQ Sequence 245 AA;

AAY06717 Length: 279 September 10, 2001 07:34 Type: P Check: 1357 ..  
 Found using '37\_39\_41' (spector091p.key)

17 LKMFNSTWVYVSQOTHERSMAQVQLVESGGGLVKGSSLRLSCAASGFTFSSHHNMNWVRQA  
 67 -----  
 77 PGKGLEWSSISSSSSYIYADSVKGRFTISRDNAKNSLYLQMNLRAEDTAVYYCARDR  
 137 GSTGMDVWGRGTLVTSSGGGGGGSDIQMTQSPLTLSASIGDRVITICR  
 143 -----  
 ...

-- Search Statistics --

Times: CPU Total Elapsed  
 FH 00:00:00.00 00:00:00.00

Number of sequences searched: 1  
 Number of sequence hits: 1  
 Number of separate matches: 1  
 Number of sequence hits saved: 0

> O <  
O I 10 IntelliGenetics  
> O <

Quest - Quick User-directed Expression Search Tool  
Release 5.4

-- Outline of search "37\_39\_41iss" --

Selected search type is key against sequence data banks or files.  
Selected scope is Sequence.

Selected sequence key from "spector091P.key":

37\_39\_41 (AA) ID 37\_39\_41 AA preliminary pattern

followed by

1 shmn  
2 any number of any character  
2 issssyiyadswkgrftis  
2 any number of any character  
2 drgstqmdv

Selected data banks and files:

Data bank : Issued\_AA , all entries

-- Output Parameters --

Format Options:

Nucleic acid code matching Exact  
Find non-matching hits only No  
Report key used Yes  
Note position of hit Yes  
Display full annotations Yes  
Sequence context 50

File Options:

Indirect file No  
Sequence or key file No  
List of hits Yes  
Hit display Yes  
Name and annotations Yes

-- Run Parameters --

Run mode Batch  
Time to start comparison now  
Notify at end of run No

No hits found.

-- Search Statistics --

Times:

CPU  
00:02:03.08

Total Elapsed  
00:06:38.00

Number of sequences searched:

197390

Number of sequence hits:

0

Number of separate matches:

0

Number of sequence hits saved:

0

Wed Sep 19 09:08:06 2001

37\_39\_41sp.find

Page 1

```
!SEQUENCE_LIST 1.0
!FINDPATTERNS on Swiss-Prot;* allowing 0 mismatches
!
1 SHNMNX{}IISSSSYIYYADSVKGFTISX{}DRGSTGMDV
```

Septem

---

Wed Sep 19 09:08:07 2001

37\_39\_41spt.find

Page 1

```
!SEQUENCE_LIST 1.0
!FINDPATTERNS on sptrembl:* allowing 0 mismatches
1 SHNMNX{}ISSSSYIYYADSVKGRTISX{}DRGSGTGMDV
```

Septem

---